

The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
William A. Hinton State Laboratory Institute  
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

01/26/2012

John Wortmann  
Assistant US Attorney, Boston District

Dear AUSA Wortmann,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED]  
Included are copies of the following:

1. Curriculum Vitae for Annie Dookhan & Lisa Glazer.
2. Drug Analysis Laboratory Receipt.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. GC/Mass Spectral analytical data for samples # [REDACTED]

I, Annie Dookhan, was the custodial chemist and performed the preliminary testing and net weight for this sample. Lisa Glazer analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read "Annie Dookhan".  
Annie Dookhan  
Chemist  
Drug Analysis Lab  
Jamaica Plain, MA. 02130  
(617) 983-6622

## Curriculum Vitae

### Annie Khan (Dookhan)

#### **Education:**

University of Massachusetts, Boston, Ma, Master of Science in Chemistry

University of Massachusetts, Boston, Ma, Bachelor of Science

Major: Biochemistry

Minor: Economics

#### **Experience:**

2003 – present

#### **Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory**

\*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

\*Writing of the Standard Operating Procedures (SOPs) and Protocols.

\*Responsible for the Quality Control and Quality Assurance of analytical instruments, reagents and controls/standards.

\*Maintenance and repairs of analytical instruments.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

\*Qualified as an expert witness in Massachusetts Courts and U.S. District Court.

\*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

\*Appointed Assistant Analyst by Assistant Commissioner of Public Health.

\*Notary Public.

2001 – 2003

#### **QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control**

\*Completed proficiency training conducted by a member of the staff within the MBL Quality Control and Quality Assurance Department for the Food and Drug Administration.

\*Method Development for creating new techniques for the QC Dept. and FDA.

\*Writing, revising and reviewing the Standard Operating Procedures (SOPs).

\*Trained and supervised new chemists and interns for the department.

\*Routine QC testing of products for the FDA.

\*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

\*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

\*Complete testing of chemicals for Vendor Validation Project for the FDA.

\*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Courses:**

##### **Department of Justice – Forensics Professionals**

Introduction to Forensic Drug Chemistry

Perspectives in Expert Testimony

Chemical Spot Test and Mechanism for Illicit Drugs

Evidence Analysis

Forensic Mass Spectrometry

Ethics in Forensic Science

Forensic Science 101: An Introduction

Transition to Leadership

Fundamentals of Forensic Questioned Documents

Fundamentals of Forensic Toxicology

#### **Additional Trainings:**

Good Laboratory Practice/Good Manufacturing Practice (GLP/GMP) training with Massachusetts Biologic Laboratory.

Quality Control/Quality Assurance (QC/QA) training according to FDA Codes and Regulations.

Gas Chromatography (GC) and Gas Chromatography/Mass Spectrometry (GC/MS) trainings with Agilent Technologies and Restek.

High Power Liquid Chromatography (HPLC) and HPLC/MS/MS trainings with Waters Cooperation.

Fourier Transform Infrared Spectroscopy (FTIR) training with Spectros and Spectrum One.

Ultraviolet-Visible Spectroscopy (UV-Vis) training with Agilent Technologies and Beckman.

Total Organic Carbon Analyzer (TOC) training with MBL and Sievers.

#### **Associations:**

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

Lisa A. Glazer

### Education

#### **Bachelor of Science Degree, CHEMISTRY January 2006**

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

#### **Bachelor of Science Degree, FORENSIC SCIENCE January 2006**

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus, Biology, Criminal Justice and Forensic Science courses

### Employment

#### **Chemist I, II State Laboratory Institute (May 2007-Present)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2007.

#### **Laboratory Technician I (August 2006 – May 2007)**

University of Connecticut Chemistry Department - Storrs, CT

- Prepared unknowns, chemical reagents and supplies for undergraduate chemistry courses
- Set-up experiment demonstrations
- Properly disposed of hazardous waste from the experiments
- Made sure labs were being conducted safely
- Kept track of student laboratory paperwork, inventoried glassware and chemicals and helped clean glassware

#### **Intern (September 2005 – November 2005)**

CONNECTICUT STATE POLICE FORENSIC LABORATORY - Meriden, CT

- Worked on a Pyrolysis Gas Chromatography project
- Observed in the GSR testing, Forensic Biology, DNA, Questioned Documents, Black and White Photo, Latent Prints, Firearms, Trace Evidence and Color Photo Units

### Trainings

#### **Multijurisdictional Counterdrug Task Force Training (May 20, 2008)**

Current Drug Trends – Methuen, MA

#### **Multijurisdictional Counterdrug Task Force Training (May 6, 2009 - May 7, 2009)**

Courtroom Testimony – Methuen, MA

#### **DEA Forensic Chemist Seminar (June 21, 2010 - June 25, 2010)**

Sterling, VA



**DRUG RECEIPT**

District/Unit D-4 DCU

Name & Rank of Arresting Officer sgt. Det. Keenan ID# 10652

To be completed by ECU personnel only

Name and Rank of Submitting Officer John J. Jones ID# 13711

Received by  Date 1-26-11

ECU Control #

No. [REDACTED]

Date Analyzed: 4/6/11

City: Boston D.C.U. Police Dept.

Officer: P.O. Diana Lopez

Def: [REDACTED]

Amount:

Subst: SUB

No. Cont: 2 Cont: pb

Date Rec'd: 01/26/2011

No. Analyzed: 1

Gross Wt.: 5.34

Net Weight: 0.14

# Tests: 6850

Prelim: Cocaine (C)

Findings: COCAINE

•2016

## DRUG POWDER ANALYSIS FORM

**No. of samples tested:** \_\_\_\_\_ **Evidence Wt.** \_\_\_\_\_

**Evidence Wt.** \_\_\_\_\_

**PHYSICAL DESCRIPTION:**

Gross Wt (2): 0.3435

Off white shiny substance

Gross Wt ( l): 0.1791

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Pkg. Wt:

### Simulations

Net Wt: 0.1490

## PRELIMINARY TESTS

### Spot Tests

Cobalt  
Thiocyanate (—) +

### Microcrystalline Tests

Gold  
Chloride 1

Marquis —

TLTA ( - ) +

Freshda's

#### OTHER T

Macko's

## OTHER TESTS

## **PRELIMINARY TEST RESULTS**

**GC/MS CONFIRMATORY TEST**

## RESULTS

## RESULTS *Concise*

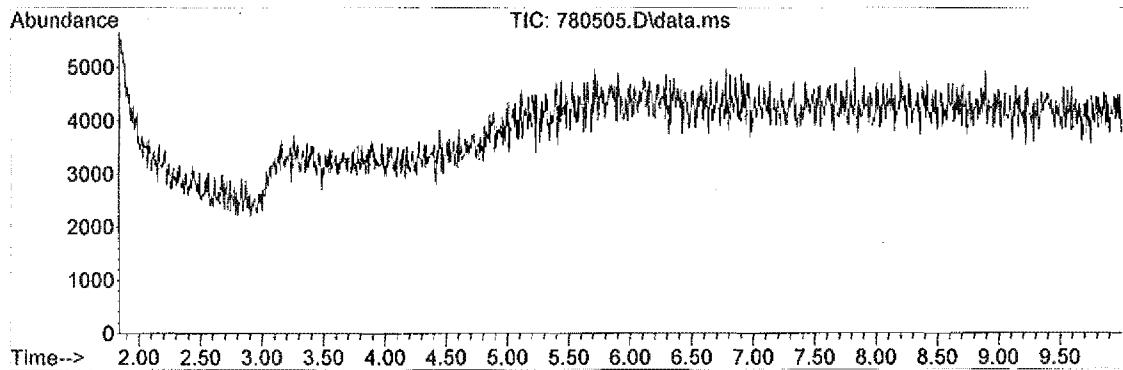
DATE 03-30-11

MS  
OPERATOR LAG

DATE 4-6-11

## Information from Data File:

File Name : F:\Q2-2011\SYSTEM 6\04\_05\_11\780505.D  
Operator : LAG  
Date Acquired : 5 Apr 2011 8:56  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



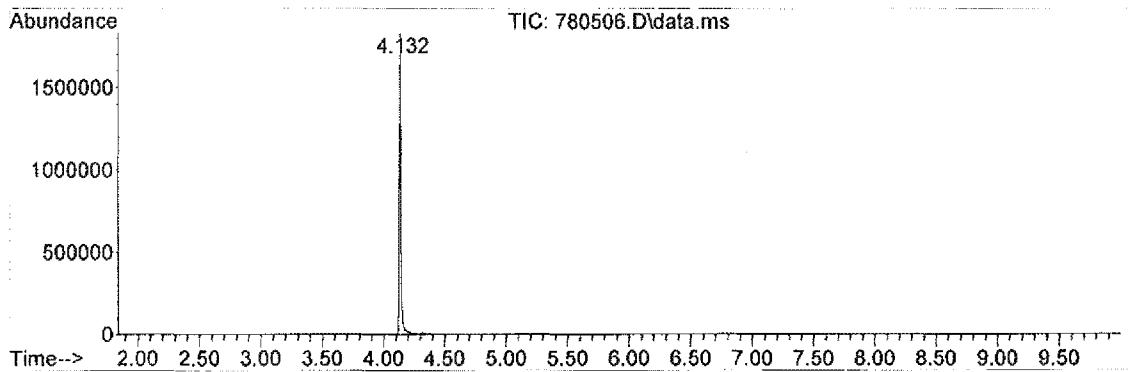
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\*\*\*NO INTEGRATED PEAKS\*\*\*

YBS  
1/26/12

## Information from Data File:

File Name : F:\Q2-2011\SYSTEM 6\04\_05\_11\780506.D  
Operator : LAG  
Date Acquired : 5 Apr 2011 9:08  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 6  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



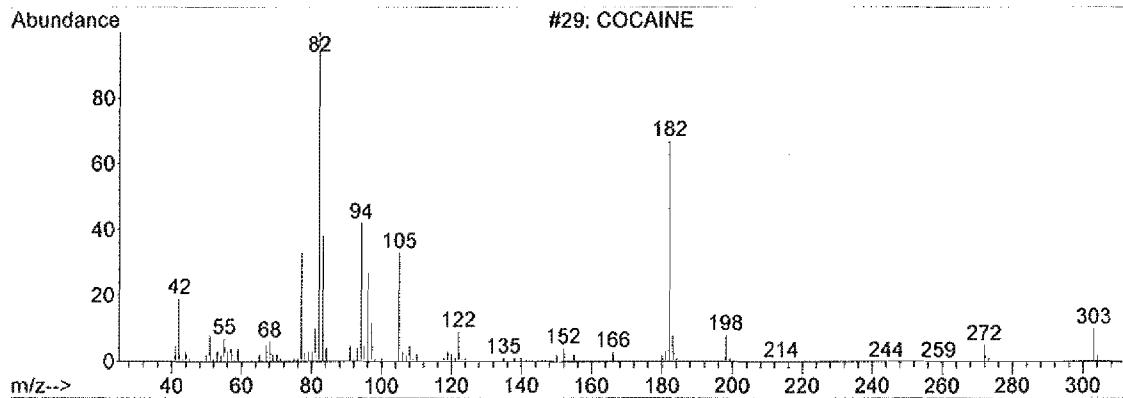
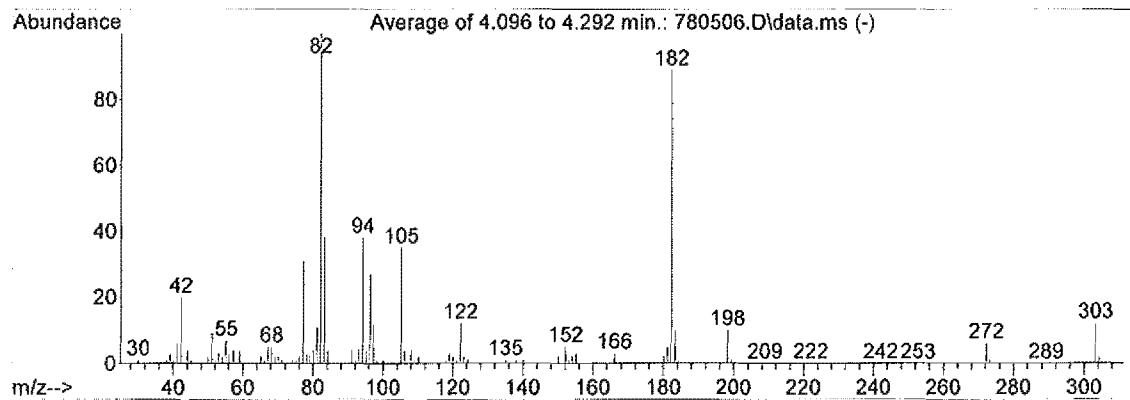
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## Information from Data File:

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 Operator : LAG  
 Date Acquired : 5 Apr 2011 9:08  
 Sample Name : COCAINE STD  
 Submitted by :  
 Vial Number : 6  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

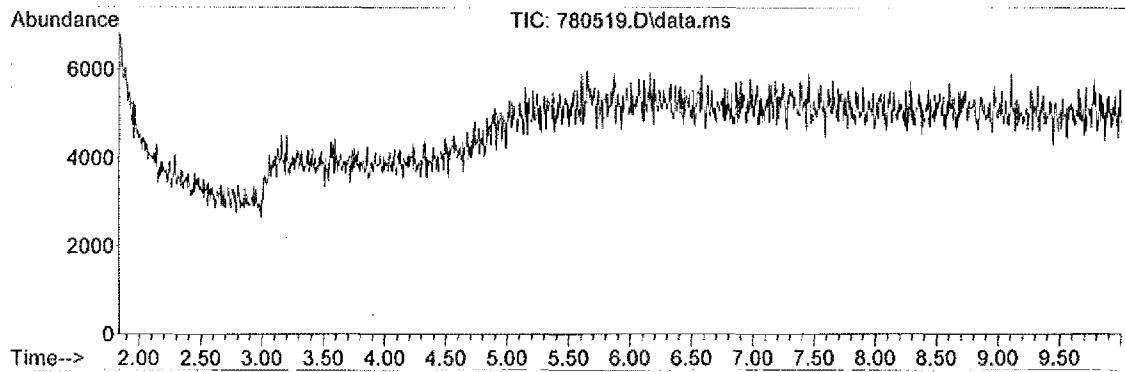
Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST08.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	4.13	C:\Database\SLI.L COCAINE	000050-36-2	99



## Information from Data File:

File Name : F:\Q2-2011\SYSTEM 6\04\_05\_11\780519.D  
Operator : LAG  
Date Acquired : 5 Apr 2011 11:56  
Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 1  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

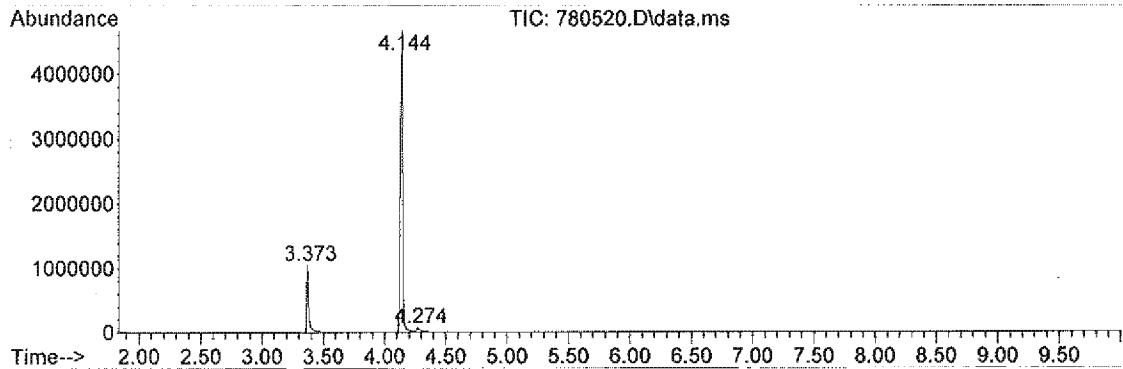


Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

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Operator : LAG  
Date Acquired : 5 Apr 2011 12:09  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 20  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



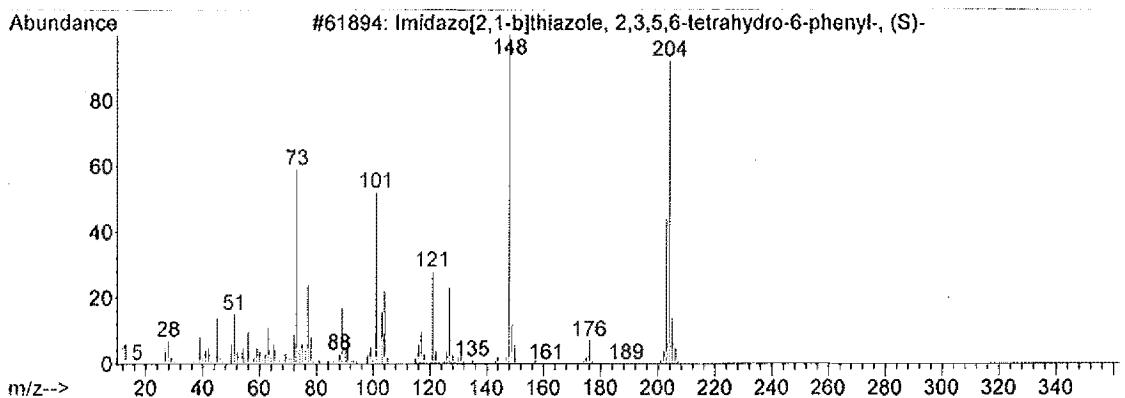
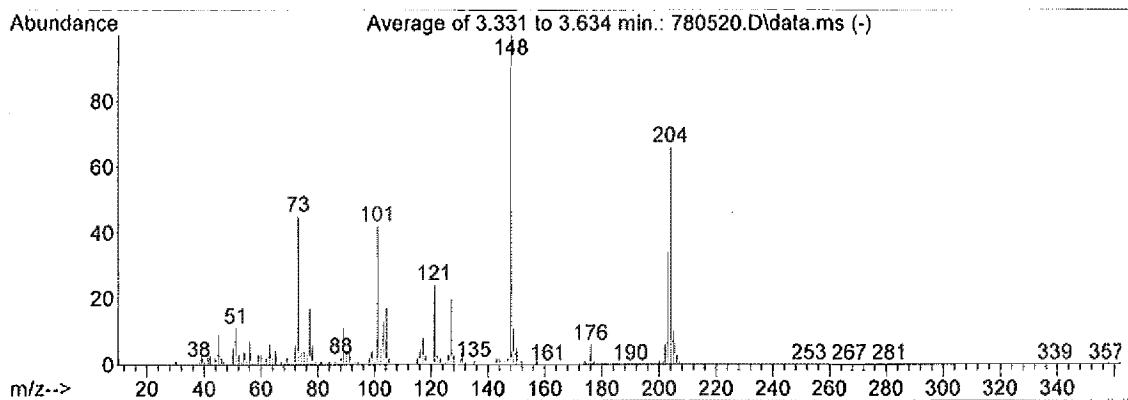
Ret. Time	Area	Area %	Ratio %
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4.144	6580825	81.66	100.00
4.274	154285	1.91	2.34

## Information from Data File:

File Name : F:\Q2-2011\SYSTEM 6\04\_05\_11\780520.D  
 Operator : LAG  
 Date Acquired : 5 Apr 2011 12:09  
 Sample Name : XXXXXXXXXX  
 Submitted by : ASD  
 Vial Number : 20  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST08.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	3.37	C:\Database\NIST08.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	014769-73-4	99
		Levamisole	006649-23-6	99
		Levamisole	006649-23-6	98



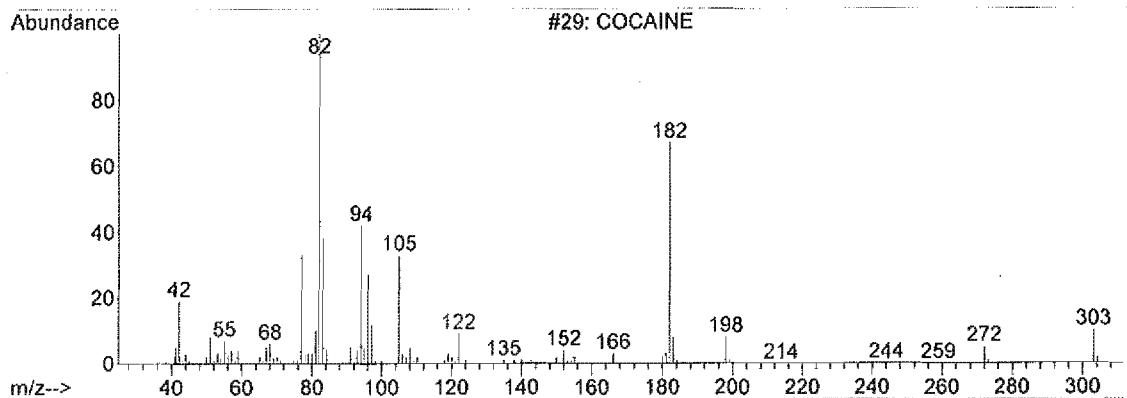
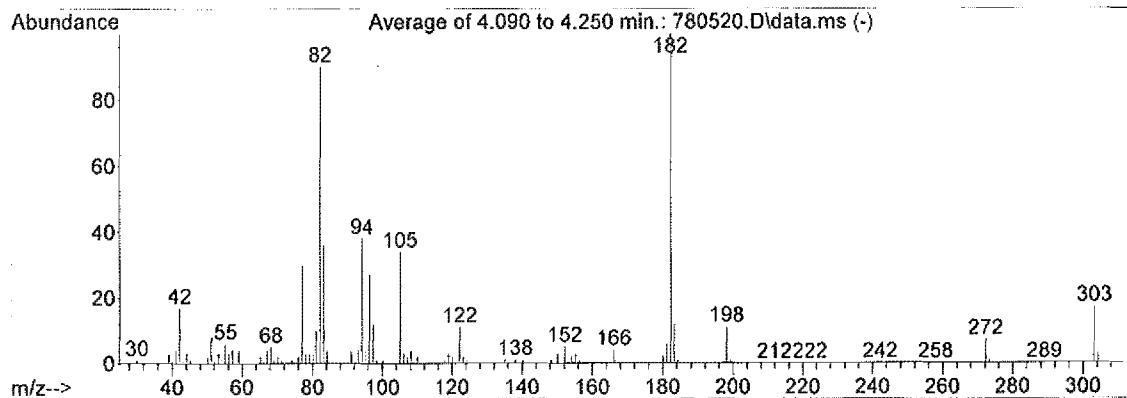
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2011\SYSTEM 6\04\_05\_11\780520.D  
 Operator : LAG  
 Date Acquired : 5 Apr 2011 12:09  
 Sample Name : XXXXXXXXXX  
 Submitted by : ASD  
 Vial Number : 20  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST08.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
2	4.14	C:\Database\SLI.L COCAINE	000050-36-2	99



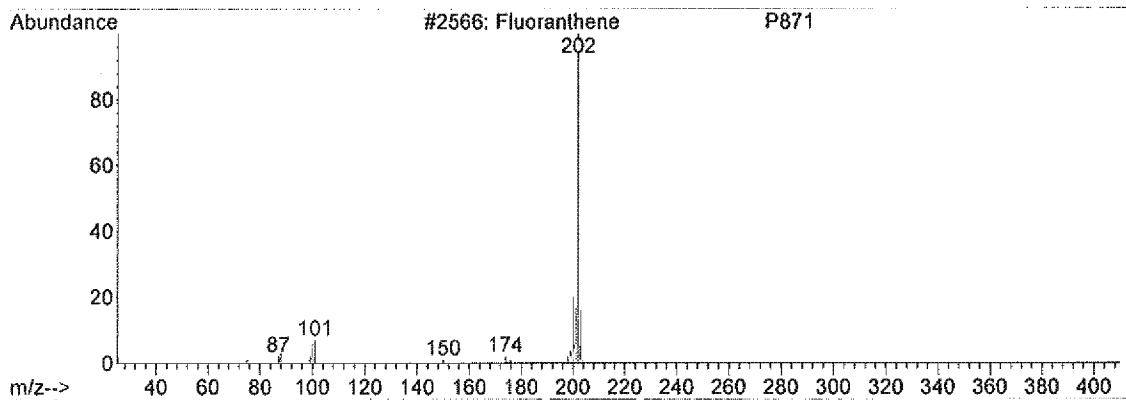
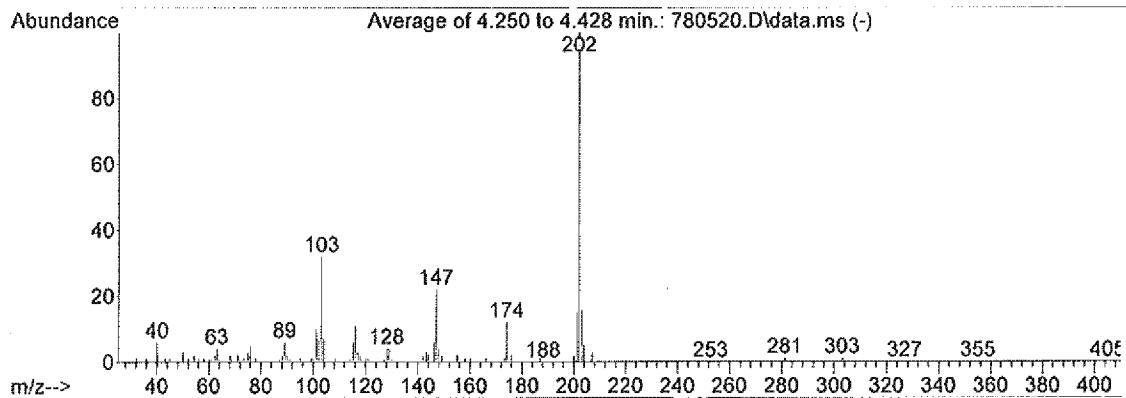
1/26/12

## Information from Data File:

File Name : F:\Q2-2011\SYSTEM 6\04\_05\_11\780520.D  
Operator : LAG  
Date Acquired : 5 Apr 2011 12:09  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 20  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST08.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

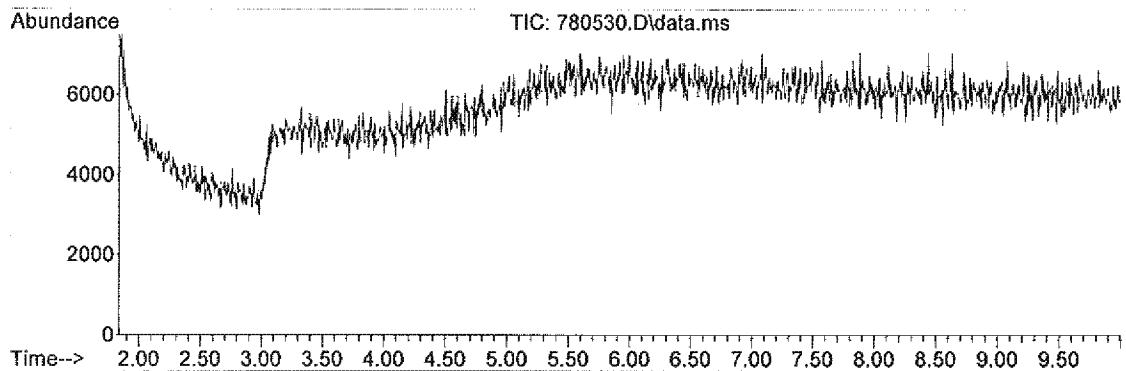
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		Fluoranthene	000206-44-0	40
		Pyrene	000129-00-0	38
		Ethoxyquin	000091-53-2	9



1/26/12  
Folk

## Information from Data File:

File Name : F:\Q2-2011\SYSTEM 6\04\_05\_11\780530.D  
Operator : LAG  
Date Acquired : 5 Apr 2011 14:18  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



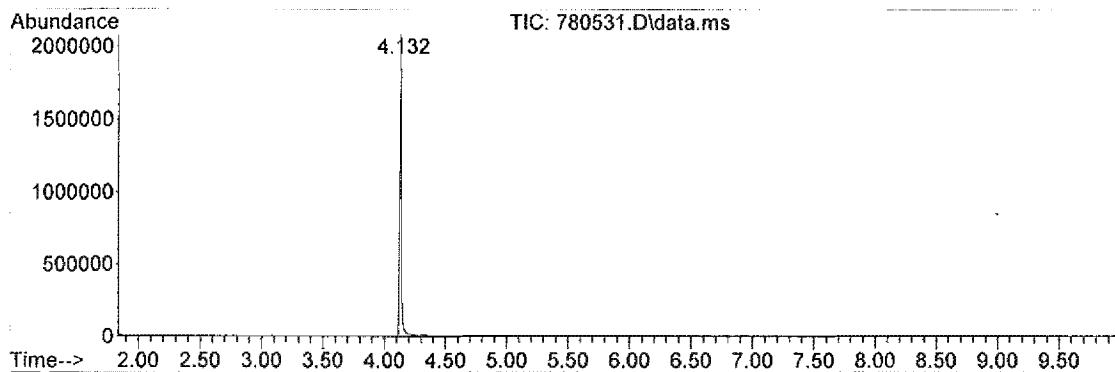
Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

2013  
1/26/12

## Information from Data File:

File Name : F:\Q2-2011\SYSTEM 6\04\_05\_11\780531.D  
Operator : LAG  
Date Acquired : 5 Apr 2011 14:30  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 6  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



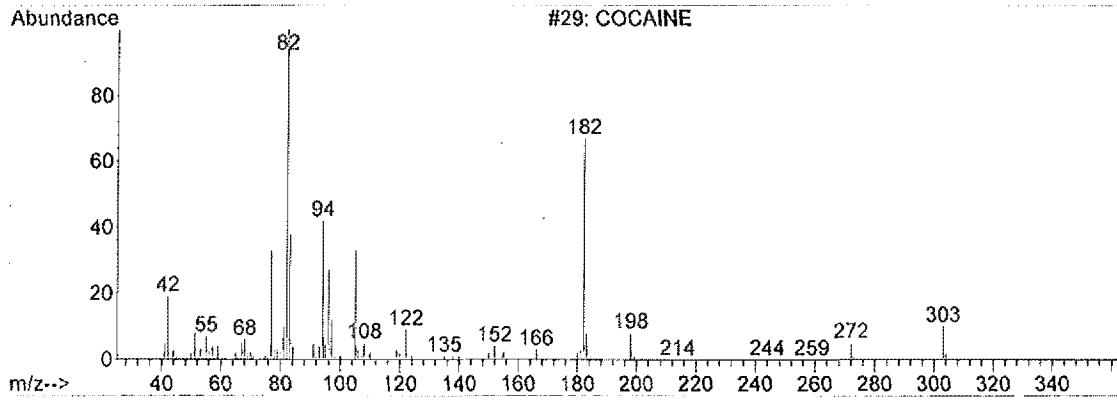
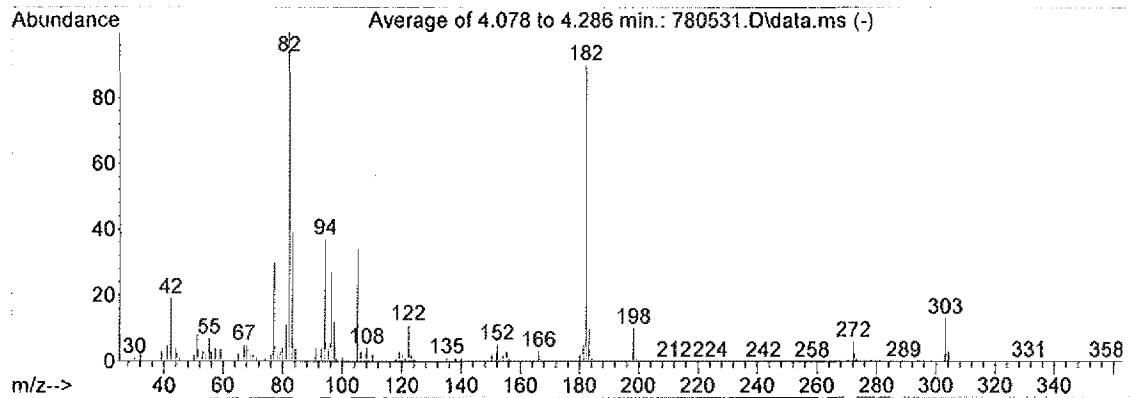
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## Information from Data File:

File Name : F:\Q2-2011\SYSTEM 6\04\_05\_11\780531.D  
 Operator : LAG  
 Date Acquired : 5 Apr 2011 14:30  
 Sample Name : COCAINE STD  
 Submitted by :  
 Vial Number : 6  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST08.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	4.13	C:\Database\SLI.L COCAINE	000050-36-2	99



1/26/2012